

Applicants traverse the rejection of claims 1-10 as obvious over Foote, U.S. Patent No. 2,656,058 in view of Babb, Published Application No. U.S. 2001/0012480.

Independent claim 1 specifies a transporter and storage unit comprising an elongated vehicle frame having a front and a rear interconnected by elongated opposite sides. Ground engaging means are on the frame whereby the frame may traverse the underlying terrain. At least two movable elongated object supports extend forwardly from the rear on at least one of the sides above the frame. The object supports are movable between positions overlying the frame and positions substantially engaging the underlying terrain. A pair of parallelogram linkages are provided for each of the object supports. Each has long links and short links and pivots at corresponding ends of the links and interconnecting the same. A first two of the pivots of each linkage of each pair are pivoted to a part of the frame defining one of the short links or to a short link joined to the frame. The first two pivots for the linkages of each pair are aligned with one another. A second two of the pivots of each linkage of each pair are pivoted to a part of a corresponding one of the object supports defining a second one of the short links or to a short link joined to the object support. The second two pivots for the linkages of each pair are aligned with one another.

No proper combination of the references discloses or suggests a pair of parallelogram linkages each for at least two moveable object supports moveable between a position overlying the frame and a position substantially engaging underlying terrain, or a frame defining one of the short links or a short link joined to the frame or one of the

object supports defining a second one of the short links or a short link joined to the object support.

Foote discloses a truck including a loading and unloading mechanism comprising a single parallelogram linkage mechanism. One short link of the linkage mechanism is pivotally mounted to a vehicle frame. An opposite pivot is connected to a tubular member 11 that pivotally mounts a platform 21. At most one pivot is connected to the tubular member. As such, Foote does not disclose or suggest two pivots of a linkage being pivoted to a part of an object support, i.e. the tubular member or the platform. Moreover, as admitted in the action, Foote only discloses a single parallelogram linkage. It does not disclose two parallelogram linkages connected to the platform or tubular member.

Babb discloses a bale handling apparatus. The interpretation of Babb in the action is incorrect.

Babb does not disclose or suggest parallelogram linkages. Moreover, it does not disclose object supports moveable between ground engaging positions and stowed positions. It simply has a stowed position and a dump position. There is no basis for combining the references.

The action simply references "long and short links 26, 28, 30, 32, 51, 52, 53, 54, 55". Elements 26, 28, 30 and 32 identify elements of a frame. The frame does not form part of a linkage mechanism, let alone a parallelogram linkage. The frame is adapted to support the other structure but not operate as part of the linkage. Elements 51, 52, 53 and 54 define beams used to form the lower cradle. This is particularly evident in Fig. 1. The

cradle does not form part of a linkage mechanism. It is instead pivotally connected to the frame so that it is pivoted between a stow position shown in Fig. 2 and a dump position shown in Fig. 3. The cradle is never moved from the frame, but is rather integrally linked to the frame.

Combining Foote with Babb would serve no purpose. Babb uses cradles pivotally mounted to a frame for dumping bales of hay. Foote discloses a linkage mechanism hingedly mounted to a frame for raising and lowering a platform. Combining the two would serve no purpose as they do not perform remotely related functions.

Thus, the conclusion that it would be obvious to modify Foote to include linkages as in Babb is incorrect as the identified elements in Babb are not linkages as recited in the claims or corresponding to those in Foote. Therefore the combination is improper and does not result in a claimed invention and claim 1 is not obvious. Claims 2-10 depend from claim 1 and are believed allowable for the same reasons therefore.

For the above reasons, claims 1-10 are believed allowable and withdrawal of the rejection is requested.

Applicants traverse the rejection of claims 11 and 12 as obvious over Foote and Babb in view of Basala, U.S. Patent No. 5,671,850.

Claims 11 and 12 depend from claim 1 and are believed allowable for the same reason therefore. The deficiencies with Foote and Babb and claim 1 are noted above. Basala does not disclose or suggest these deficiencies. Moreover, the action references Basala as teaching an end plate 64 to define a short link and a long link 68. The plates 64

do not define a link. Elements 68 are springs. Otherwise, Basala discloses a rack pivotally mounted to a frame. The combination would not result in a claimed invention. Moreover, there is no basis for making the combination. Claims 11 and 12 are believed allowable and withdrawal of the rejections requested.

Applicants traverse the rejection of claims 13 and 14 as obvious over Foote in view of Babb.

Independent claim 13 specifies a transporter and storage unit including, in pertinent part, two moveable elongated cradles extending forwardly from the rear on each sides above a frame and a pair of parallelogram linkages for each cradle, each having long links and short links, and having pivots at corresponding ends of the links and interconnecting the same. The long links for one of the cradles are longer than the long links for the other cradle. A first two of the pivots of each linkage of each pair are pivoted to a part of the frame defining one of the short links or to a short link joined to the frame. A second two of the pivots of each linkage of each pair are pivoted to a pair of a corresponding one of the cradles defining a second one of the short links or to a short link joined to the cradle.

Claim 13 is believed allowable for the same reasons discussed above relative to claim 1. Moreover, neither Foote or Babb discloses long links for one cradle being longer than long links for another cradle. Particularly, the action does not properly identify the long links of one of the cradles being longer than the long links of another cradle. Nor could it as there are no elements serving the function of long links, as recited in claim. Nor does the action identify any such teaching. For the above reasons, claims 13 and 14 are

believed allowable and withdrawal of the rejection is requested.

Applicants traverse the rejection of claim 15 as obvious over Foote and Babb in view of Ruhl, U.S. Patent No. 5,244,313. Claim 15 depends from claim 13. The deficiencies with respect to Foote and Babb are noted above. Ruhl does not disclose or suggest these deficiencies. Instead, it is cited for placement of a cylinder. The combination would not result in the claimed invention. Therefore, claim 15 is believed allowable and withdrawal of the rejection is requested.

Applicants traverse the rejection of claims 16 and 18 as obvious over Hagenbuch et al., U.S. Patent No. 4,396,668 in view of Foote and Babb.

Claim 16 specifies an apparatus comprising a frame including two spaced cross members connected to one another by at least one elongated stringer, the elongated stringer(s) having an upper, relatively low, support surface. A generally centrally located upright element extends upwardly from each of the cross members and terminates in an upper, relatively high support surface. A plurality of parallelogram linkages each have two relatively two short links with four first linkages having relatively long links and four second linkages having intermediate links to respectively provide four linkages having the relatively long links connected by pivots at their ends to the relatively short links and four links just having the intermediate links connected by pivots to the relatively short links to respectively form first and second linkages. Each of the cross members mount one of the four linkages and one of the second linkages on each side of the upright element at one of the relatively short links with the first linkages being outermost and the second linkages being innermost.

Four cradles each have spaced end plates interconnected by at least one support member. The end plates each define one of the relatively short links. Stub shafts extend from the end plates to define those of the pivots connecting the relatively long links and the intermediate links to the short links defined by the end plates. The relatively long links have lengths such that cradles mounted at the first links are moveable between positions substantially engaged with the terrain underlying the frame and resting on the relatively high support surfaces. The intermediate length links have a length so that cradles mounted to the second linkages are moveable between positions substantially engaged with the terrain underlying the frame and resting on the relatively low support service. Motors independently move the cradles between the positions.

Hagenbuch et al. does not disclose or suggest a transporter and storage unit including an object support moveable between positions overlying a frame and positions substantially engaging underlying terrain, or parallelogram linkages having long links and short links. Hagenbuch et al. is directed to a container handling vehicle for carrying and dumping a load. Particularly, referring to Figs. 25 and 26, one container 30 on the right is shown in the stowed position and on the left another container 26 is shown in a dumped position. Both positions are at approximately the same height. The container never engages an underlying terrain.

Hagenbuch et al. discloses a four-bar mechanical linkage. However, the linkage is not a parallelogram linkage. It does not have opposite sides that are parallel and equal. The links comprise a pair of opposite links 182 and 184 but are not parallel. Nor are they

equal. The second set of opposite links is formed by the container cradle 122 and the support structure 117. The support structure is L-shaped and is substantially longer than any of the other links. The link formed by the container cradle is substantially shorter. As such, there is not a first and second short link disclosed. Clearly this is not a parallelogram nor does it provide any motion similar to a parallelogram. The reference to the link as long, intermediate and short in the action is not supportable and does not correspond to that recited in the claim.

As discussed above, Foote discloses a single parallelogram linkage for moving a platform. It provides a different function and serves a different purpose from that in Hagenbuch et al. A parallelogram linkage as in Foote would not provide the dumping function required by Hagenbuch et al. Nor does Hagenbuch suggest the desirability of having the container move to a ground position as doing so would not allow the dumping function.

Babb is discussed above and is likewise not relevant to the claim and it does not use any linkage mechanisms or perform any related function to the claims herein. It instead provides a different dumping function from that shown in Hagenbuch et al.

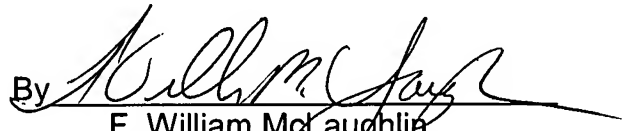
The combination of the reference is improper. Moreover, the combination would not result in the claimed invention. Therefore, claim 16, and its dependent claim 18 are believed allowable and withdrawal of the rejection is requested.

Applicants traverse the rejection of claim 17 as obvious over Hagenbuch et al. Foote, Babb and Ruhl.

Claim 17 depends from claim 16 and is believed allowable for the same reasons therefore. Ruhl does not disclose or suggest the deficiencies noted with respect to the other references. Therefore, claim 17 is believed allowable and withdrawal of the rejection is requested.

Reconsideration of the application and allowance and passage to issue are requested.

Respectfully submitted,

By 
F. William McLaughlin
Registration No. 32,273

WOOD, PHILLIPS, KATZ,
CLARK & MORTIMER
Citicorp Center, Suite 3800
500 West Madison Street
Chicago, Illinois 60661-2511
(312) 876-1800

Dated: October 14, 2005